CONTRIBUTION TO THE LICHEN FLORA OF URUGUAY XIX.

Lichens from Rio de la Plata coast.

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This is the first paper dealing with the lichen flora of the coast of the Atlantic Ocean and the Rio de la Plata within the limits of the Marsden Square 413 (30°-40° S and 50°-60° W.) Such long-term planned study is a subprogram included in the "Plan de Ciencias del Mar" (URU/82/009) which the financial support of PNUD/UNESCO is carried out by the Facultad de Humanidades y Ciencias, Universidad de la República, Montevideo, Uruguay. The National Coordination of this Program is undertaken by the Director of the Department of Oceanography of this Faculty Prof. C/N Mario Bolívar.

The coast of the Rio de la Plata (RPC) in the Department of Montevideo was choised to begin this floristic study because the suitable habitats for the lichen growth are at present in very critical conditions. A part of the coast is beeing transformed in terraces for recreative purposes and all the eastern zone of the same will be severely affected by the new system of drainage of the waste-waters from Montevideo City.

The literature references from the lichen flora from marine and maritime habitats in the Atlantic coast of South America are infortunately reduced to out dated and scarce quotations from the Patagonic coast of Argentina (Grassi 1950) and in the vicinity of Rio de Janeiro, Brazil (Vainio 1890).

For each of the below listed species (which are preserved in the private herbarium of the author) is pointed out if this species is already reported from maritime habitats.

The zonation scheme used in the present paper is based on Du Rietz (1932).

The numbers between brackets belong to the author's numbering system.

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Buellia montevidensis Malme.
PUNTA GORDA: on rocks, middle hygrohalin zone (7495). This species is only known from the type locality, a small island named Isla de Flores off Rio de la Plata coast (Malme 1927/28, Magnusson 1950). Without doubt this habitat is located in a maritime zone.

Caloplaca americana (Malme) Zahlbr.
RPC: between Punta Shannon and Punta Carretas, upper hygrohalin zone (8193). So far as I know this species is reported at first time from a maritime habitat.

Caloplaca cinnabarina (Ach.) Zahlbr.
RPC: between Punta Shannon and Punta Carretas,upper hygrohalin zone(8192).
PAJAS BLANCAS: on rocks, aerohalin zone (349).
In a former paper (Osorio 1967) three collections of this species were reported from the locality of Piriápolis, Maldonado Department. According with annotations taken from the collector's labels and deposited in our private library the above mentioned samples growth on rocks in the Rio de la Plata coast.

Caloplaca festiva (Fr.) Zw. var. *contigua* (Mass.)Oliv.
PUNTA GORDA: on perpendicular S-faced stones, aerohalin zone (7493). This species is reported at first time from a maritime habitat.

Caloplaca sublobulata (Nyl.) Zahlbr.
PUNTA GORDA: on rocks, middle hygrohalin zone, locally common (7492). Reported at first time for Uruguay. Our collections possess the marginal lobes thick and distinctly effigurate; the protothallus is poorly developed. Dr. A. Fletcher (pers. comm.) had also identified this species among some collections made on the oceanic coast of Uruguay near the boundary with Brazil (unpublished records).

Catillaria chalybeia (Borr.) Mass.
PUNTA GORDA: on stones, aerohalin zone (7494). Already reported by Fletcher (1975a & b) from the supralitoral zone and the terrestrial region.

Diploschistes ochraceus (Anzi) Stein.
RPC: between Punta Shannon and Punta Carretas, on rocks aerohalin zone (8300). This is the first report from a maritime habitat.

Lecanora fusca Müll. Arg.
RPC: between Punta Shannon and Punta Carretas, rocks in a meadow, aerohalin zone (8299). In the Department of Montevideo there are two collections already published from maritime habitats (Magnusson 1950, Osorio 1966).

Lecidea montevidensis Müll. Arg.
PUNTA GORDA: rocks in a meadow, aerohalin zone (7496, 7497).
RPC: between Punta Shannon and Punta Carretas, rocks in a meadow, aerohalin zone (8189).
This is the first report from a maritime habitat.

Ochrolechia osorioana Vers.
PUNTA GORDA: on perpendicular S-faced stones, aerohalin zone (7489).
RPC: between Punta Shannon and Punta Carretas, on rocks upper hygrohalin zone (8191).
Verseghy (1962) published two collections from the Department of Maldonado (Punta Colorada and Punta Fría, Piriapolis) gathered in maritime habitats.

Parmotrema cetratum (Ach.) Hale.
PUNTA GORDA: on perpendicular S-faced stones, locally common, aerohalin zone (7491). Lynge (1929) reported this species from the same locality but no indications about the habitat are given.

Pseudoparmelia papillosa (Lynge ex Gyeln.) Hale
PUNTA GORDA: on perpendicular S-faced stones, aerohalin zone (7490).
RPC: between Punta Shannon and Punta Carretas, on rocks upper hygrohaline zone, (8188). In Uruguay this species is already reported from a maritime habitat: the island Isla de Gorriti off the Rio de la Plata coast, Department of Maldonado (Osorio 1967).

Xanthoparmelia conspersa (Ach.) Hale.
RPC: between Punta Shannon and Punta Carretas, on rocks upper hygrohalin zone (8190). Fletcher (1975a) reported this species from a maritime habitat. Müller Argau (1889) reported *Parmelia conspersa* var. *rugulosa* from the small island Isla de Flores but this old identification needs a revision.
Shortly after the gathering of this species the collection site was filled up. Therefore this is the first documented example of the uncertain future of the lichen flora in such habitats, at least in the Department of Montevideo.

SUMMARY.
Thirteen lichen species collected in the Rio de la Plata coast are listed. *Caloplaca sublobulata* is added to the known flora of Uruguay.
Caloplaca americana, *Caloplaca festiva* var. *contigua*, *Diploschistes ochraceus* and *Lecidea montevidensis* are reported at first time from a maritime habitat.

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